

Notice of Allowability

Application No.

09/842,837

Applicant(s)

VIANNA ET AL.

Examiner

Art Unit

Tuan T Dinh

2841

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/08/04.
2. ☒ The allowed claim(s) is/are 2-8, 13, 15 (renumber claims are 1-9).
3. ☒ The drawings filed on 27 April 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 20041111.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Robert H. Walter on 11/16/04.

The application has been amended as follows: to overcome the references cited.

Cancel claim 1 without prejudice.

Claims 2-6, and 13 would amended as follow:

2. (currently amended). A The plane according to ~~claim 1~~ **claim 4**, wherein, when said first and second modules are connected thereto, the layout of the modules on said device plane is substantially H-shaped.

3. (currently amended). A The plane according to ~~claim 1~~ **claim 4**, wherein said plurality of second connectors is arranged in such a manner as to allow for maximum module densities.

4. (currently amended). A ~~The plane according to claim 1~~ **A communication device plane having a high speed bus for interconnecting a plurality of modules, said device plane comprising:**

a plurality of first connectors for receiving a plurality of first modules, said plurality of first connectors being arranged in parallel with each other and longitudinally with respect to the length of said device plane, and being mounted to said communication device plane substantially centrally thereon, each of said first connectors extending so as to substantially cover the length of said device plane;

a plurality of second connectors for receiving a plurality of second modules, said second connectors being substantially parallel to said first connectors and being mounted to said communication device plane in groups on both sides of said plurality of first connectors such that two of said groups on each side may be disposed longitudinally with respect to each other,

wherein said plurality of second connectors is disposed in a staggered arrangement on the communication device plane, allowing for maximum densities of alternating module: in a front row and a back row.

5. (currently amended). ~~A The plane according to claim 1~~ A communication device plane having a high speed bus for interconnecting a plurality of modules, said device plane comprising:

a plurality of first connectors for receiving a plurality of first modules, said plurality of first connectors being arranged in parallel with each other and longitudinally with respect to the length of said device plane, and being mounted to said communication device plane substantially centrally thereon, each of said

first connectors extending so as to substantially cover the length of said device plane;

a plurality of second connectors for receiving a plurality of second modules, said second connectors being substantially parallel to said first connectors and being mounted to said communication device plane in groups on both sides of said plurality of first connectors such that two of said groups on each side may be disposed longitudinally with respect to each other,

wherein the length of the device plane is less than twice the length of one of said second modules.

6. (currently amended). A The according to ~~claim 1~~ claim 4 further comprising: a plurality ~~fe~~ of third connectors for receiving a plurality of third modules, said plurality of third connectors being arranged such that they are co-linear with said first modules.

13. (currently amended). A ~~The plane according to claim 1~~ A communication device plane having a high speed bus for interconnecting a plurality of modules, said device plane comprising:

a plurality of first connectors for receiving a plurality of first modules, said plurality of first connectors being arranged in parallel with each other and longitudinally with respect to the length of said device plane, and being mounted to said communication device plane substantially centrally thereon, each of said first connectors extending so as to substantially cover the length of said device plane;

a plurality of second connectors for receiving a plurality of second modules, said second connectors being substantially parallel to said first connectors and being mounted to said communication device plane in groups on both sides of said plurality of first connectors such that two of said groups on each side may be disposed longitudinally with respect to each other,

wherein said plane is a double sided midplane.

Allowable Subject Matter

2. Claims 2-8, 13, and 15 are allowed.

The following is an examiner's statement of reasons for allowance: the references cited disclose a communication device plane having a high speed bus comprising: a plurality of first and second connectors for receiving a plurality of first and second modules, the first and second connectors being parallel with each other, each of the first connectors extending so as to substantially cover the length of the device plane, and some other claimed elements. However, they do not disclose or render obvious in combination of the device plane having the second connectors disposed in a staggered arrangement on the device plane, allowing for maximum densities of alternating modules in a front row and a back row (as recited in claim 4), the length of the device plane is less than twice the length of one of the second modules (as recited in claim 5), and the device plane is a double sided midplane (as recited in claim 13).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably


accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan T Dinh whose telephone number is 571-272-1929. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kammie Cuneo can be reached on 571-272-1957. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tuan Dinh
November 19, 2004.



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